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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,047	12/04/2003	Henry P. Moreton	NVDA P000721	8951

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EXAMINER

TUNG, KEE M

ART UNIT

PAPER NUMBER

2671

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/728,047

Applicant(s)

MORETON ET AL.

Examiner

Kee M. Tung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 16, 17, 20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 16, 17, 20 and 22-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The RCE and amendment filed 9/22/05 and 9/6/05 have been considered in preparing this Office action.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 16, 17, 20 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krech, Jr. (6,057,852 hereinafter "Krech").

Krech teaches graphics system (Figs. 1-4) to perform a method for generating a primitive extension, the primitive extension defining the connectivity and vertices used to specify a collection of connected primitives within a generalized primitive (Figs. 5A – 5G and cols. 9 and 10, Table I) comprising providing an originating primitive (see Figs. 5A-5G, the first primitive on the left most); retrieving parameters associated with the generalized primitive, the parameters include a width (w), a step size (s) and an anchor width (a) (It is noted that Krech did not particularly discuss the used of the parameters, ie, w, s, and a, but Krech did describe how to generate the primitive extension as shown in Figs. 5A to 5G and in Table I, such as, number of vertices to form originating and adjoining primitives, number of vertices to be added to either an originating primitive or an adjoining primitive to form either an adjoining primitive or additional adjoining primitive, and an anchor width (the one is shared by all triangle), indicates a number of

anchor vertices to be used) (see description column in table I); and generating the primitive extension of the originating primitive using the parameters (see examples in Figs. 5A-5G and Table I). Therefore, at least claim 1 would have been obvious by Krech as set forth above.

As per claim 2, Krech teaches one of the parameters indicates a number of the vertices to form the originating primitive (see Figs. 5A-5G and Table I, such as, there is 1 vertex-draws 1 pixel on the screen for a point).

As per claim 3, Krech teaches the generalized primitive is a fan-type primitive (Fig. 5C).

As per claim 4, Krech teaches the generalized primitive is a strip-type primitive (Fig. 5E).

As per claim 5, Krech teaches one of the parameters indicates a number of new vertices to be added to form a primitive adjacent to the originating primitive (see Table I, such as, n vertices-draws a triangle after the first three vertices then another triangle for each additional vertex ... for fan-type triangle).

As per claim 6, Krech teaches one of the parameters indicates a number of the vertices to be added to form a primitive adjacent to the originating primitive to be used as anchor vertices for each adjacent primitive (see Fig. 5C, vertex  $V_0$  is shared by all the triangles and Table I, such as, n vertices-draws a triangle after the first three vertices then another triangle for each additional vertex ... for fan-type triangle).

As per claim 7, Krech teaches the parameters indicate a number of the vertices that are shared between two primitives (see Fig. 5E and Table I, such as, n vertices-

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draws a triangle after the first three vertices then another triangle for each additional vertex ... for strip-type triangle).

As per claim 8, Krech teaches the parameters indicate a number of the vertices in addition to the anchor vertices, needed to define an adjacent primitive (see Fig. 5C, vertex  $V_0$  is shared by all the triangles and Table I, such as, n vertices-draws a triangle after the first three vertices then another triangle for each additional vertex ... for fan-type triangle).

As per claim 24, Krech teaches the generalized primitive parameters are provides through an API (col. 10, lines 62-64, col. 17, lines 30-33).

As per claim 25, Krech teaches sufficient primitives in the generalized primitive are generated to approximately cover a surface (col. 12, line 52 to col. 13, line 3, CPU communicates and/or submits a large amount of primitives to the GA chips and memory).

As per claim 26, Krech teaches the exterior is output as a data stream comprising the data for each of the vertexes of the primitive extension (see Figs. 5A-5G).

Claims 16, 17, 20, 22, 23 requires generation of a primitive extension represented in an ordered data stream are similar in scope as claims 1-8 and 24-26 which also generates primitive extension, and thus are rejected under similar rationale (see Figs. 5A-5G and Table I).

### ***Response to Arguments***

3. Applicant's arguments filed 9/6/05 have been fully considered but they are not persuasive.

The rejection has been modified in order to fully considered applicant's arguments. Applicant argues that there is no teaching or suggestion in Krech that  $w$ ,  $s$  and  $a$  parameters are retrieved for the different connected primitives and that these parameters are used in generating the primitive extension. Well, Krech may not used the same terminology as applicant, for example, parameters  $w$ ,  $s$  and  $a$ . However, Krech clearly teaches or suggests how to generate the primitive extension based on the information as provide in the Table I. The information inherently related to the claimed parameters, such as,  $w$ ,  $s$  and  $a$  in order to properly generate the primitive extension. The examiner points to applicant that Figs. 5A to 5G show how each different type primitives being drawn and Table I describes for example, for fan-type triangle,  $n$  vertices-draws a triangle after the first three vertices then another triangle for each additional vertex ( $w$  # of vertices to form additional primitive). The first vertex  $V_0$  is shared by all the triangles (# of anchor vertices to be used).

Therefore, for at least the reasons set forth above, applicant's arguments are not deemed to be persuasive.


### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kee M. Tung whose telephone number is 571-272-7794. The examiner can normally be reached on Tuesday - Friday from 5:30 am - 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kee M Tung  
Primary Examiner  
Art Unit 2671